

ABSTRACT OF THE DISCLOSURE

[0035] A pressure sensor includes a membrane having a radially peripheral edge region fixedly arranged on a support. One side of the membrane can be acted on by a medium being measured and the membrane can be deflected in response to pressure of the medium. Measuring elements and an electric circuit interconnecting the measuring elements are arranged on the membrane, the measuring elements and the circuit being applied by the thick-film technique and sintered on in a thermal process. The membrane is made of an electrically conducting metal and bears an insulating layer, on which the measuring elements and the electric circuit are arranged. In this case, the insulating layer consists of a material having a coefficient of expansion that lies between the coefficient of expansion of the metal of the membrane and the coefficient of expansion of the material of the measuring elements and the electric circuit.